

so as not to be visible when the insect is viewed from above. Abdomen round and swollen, wider than the thorax, but seeming as if cut off short, the posterior extremity being turned under; there are six segments in the abdomen. Colour dark brown, almost black, on the thorax, with short yellow hairs; abdomen dark brown, with a yellow band marking each segment; head black; wings hyaline; halteres yellow. The *winglets* are very large and scale-like. *Eyes* very large, compound, occupying all the upper part of the head, but not highly convex. *Antennæ* inserted in front, between the eyes; two-jointed, both joints very short; the style is very long, inflated near the base, narrow in the shaft and slightly dilated at the tip, where there are two short bristles. *Proboscis* very short, almost obsolete, conical, placed so much beneath the down-turned head as to be extremely difficult to detect. *Feet* long and slender; tarsus five-jointed; claw double, with three pulvilli. *Wings* with brown costal and subcostal veins; discoidal cell open; cubital cell large; the postical vein appears to have a branch almost if not quite disconnected. *Length* of the body, in the usual position, nearly $\frac{1}{5}$ inch.

The eggs of this insect are very small, sooty black, truncate-ovate; as stated above, they are laid in such numbers as to cover a twig with a black coating.

The [newly hatched] larvæ are very minute, about $\frac{1}{60}$ inch long; dark grey or brown in colour; elongated, narrow, tapering at both ends, with twelve distinct segments, of which the fourth from the head is the widest; on each segment is a row of short fine hairs. They have a wriggling mode of progression forwards, and are in constant motion. The head is pointed and terminates in two very small hooks, with a pad or pulvillus. The posterior extremity is also acute, ending in three very minute points, with, on each side, a thin curved appendage. The spiracles are only two, very minute circular orifices, situated on the last segment but one.

Both Mr. Hudson and I tried without success to procure the pupæ. The larva of a fly not far removed from *Henops* (*Clitellaria*) is said to take more than two years before undergoing its transformation.

In consideration of the fact that the larvæ of the whole family of Acroceridæ have not hitherto been known, and that the descriptions of the various genera are but fragmentary, the above account of *Henops brunneus* may be of interest. The larva would seem to be perhaps more similar to those of *Cecidomyia* than to any others of the order, though the perfect fly is quite different.

On the Systematic Position of the Genus *Hero*.

By M. A. VAYSSIÈRE.

Among the Opisthobranchiate Gasteropods there are some genera the systematic position of which is still uncertain. Having had the opportunity of capturing, in the Bay of Marseilles, two or three individuals belonging to one of these genera, I set myself the task of establishing their characters.

The genus *Hero*, established by Lovén in 1839 for some small mollusks collected in the seas of the north of Europe, has hitherto been placed, by all naturalists (Alder and Hancock, G. O. Sars, Bergh, Fischer, &c.) who have paid any attention to it, in the family Dendronotidæ, one of the subdivisions of the great group of the Tritoniadæ. All these different naturalists seem to have had at their disposal only individuals preserved in alcohol; the figures given by Bergh and Sars would lead to the belief that the appendages with which the whole extent of the margin of the mantle is furnished are dendritic in form. We believe that this appearance is the effect of preservation in alcohol.

The study of the jaws and radula ought to have shown that the genus had nothing to do with the Dendronotidæ.

On observing living individuals, we at once see, from the conformation of their lateral appendages, that the genus *Hero* belongs to the great group of the Æolididæ; in fact, these appendages, which, in individuals preserved in alcohol, have a dendriform appearance, are really true fusiform dorsal cirri, arranged symmetrically in pedunculated groups upon the lateral parts of the back. These groups of cirri have much analogy with those of *Calura Cuvolinii*; only in the genus *Hero* we find in front of the body, on the sides of the cephalic region between the labial tentacles and the rhinophores or dorsal tentacles, a pair of tufts of cirri which are entirely deficient in the genus *Calura*. These two tufts possess the longest and most numerous cirri; all the groups posterior to the rhinophores each present only one, two, or three rudimentary cirri.

From our investigations, the following generic diagnosis may be drawn:—

General form of the body resembling that of the Tritoniadæ, with its dorsal margins distinctly keeled; foot a little wider than the body.

Labial tentacles strong and recurved; rhinophores simple and non-retractile. Dorsal cirri fusiform, inserted dichotomously upon short peduncles arranged on the lateral parts of the back; the peduncles of the first pair, placed in front of the rhinophores, are the only ones forming groups well-furnished with cirri; all the post-rhinophorian peduncles bearing only one, two, or three rudimentary cirri. Cnidophorous sac with numerous nematocysts.

Anus in the middle of the right flank; sexual orifice on the same side, but placed further forward. Penis unarmed.

Jaws with irregular denticulations on the masticatory margin. Radula triseriate; median tooth with the plate denticulated.

Esophagean ring composed of four ganglia (two cerebroid and two pedal ganglia); eyes pedunculate; otocysts with numerous otoliths.

The individuals taken in the Bay of Marseilles differ in several characters derived from the radula and jaws from the *Hero formosa* studied by Sars and Bergh. We regard them as representing a new species.—*Comptes Rendus*, July 9, 1888, pp. 136-138.